

Antenna Calibration Glossary

March 9, 2012

Version 1.0

Provider	Company, university, or group submitting antennas for calibration
NGS Calibration Team	NGS staff conducting calibrations
PCO	Initial phase center offset, given in north-east-up components relative to the antenna reference point (ARP)
PCV	Phase center variations; may be provided as a function of elevation angle in the antenna frame (1D), or elevation and azimuth angle in antenna frame (2D)
ARP	Antenna reference point, a non-detachable physical reference point on the antenna to be defined by NGS. This is usually permanent point on the bottom surface of the antenna
Relative calibration	Phase center determinations from a stationary test pier referenced to a standard (Dorne Margolin choke ring antenna, type T: AOAD/M_T)
Absolute calibration	Robot calibration, where PCO/PCV are independent of the reference antenna
Type mean calibration	Calibration values for an antenna model, where several test samples are separately calibrated and averaged together
Clones	Identical antennas that are marked, labeled and sold as different models under different brand names
Antenna group	Three or more identical antennas. (May include clones.)
Individual calibration	Calibration values which are specific to the antenna serial number; at NGS, individual calibrations are conducted on a special case basis (see <i>Calibration Eligibility</i>)
ANTEX format	ANTenna EXchange Format, used to distribute antenna calibration values; see ftp://igscb.jpl.nasa.gov/igscb/station/general/antex14.txt for format description
ANTINFO format	Format historically used by NGS to distribute relative calibration values; see http://www.ngs.noaa.gov/ANTCAL/documents/format.txt for format description
Antenna Code	Abbreviated code used to uniquely identify an antenna and calibration values. All Antenna Codes are a 20-char string consisting of: <ul style="list-style-type: none">• 3-char manufacturer• up to 12-char for antenna model

	<ul style="list-style-type: none"> • 1 blank between antenna model and radome type • 4-char for radome type <p>See the IGS format description for “antennas” at ftp://igscb.jpl.nasa.gov/pub/station/general/rctr_ant.tab</p>
Antenna Name	A short description of the antenna, used as an antenna description comment on the NGS website and in the ANTINFO and ANTCAL files. Antenna Name should begin with the model/part number of the antenna as reflected in the label, and include the revision number, again as reflected in the label.
Radome	The removable device/cap that some users place over an antenna. Inclusion of a radome must be explicitly listed in the Antenna Code. If no radome is used then it will be listed explicitly as “NONE”.